

Preliminary Program
UNMIXING THE SNCs: CHEMICAL, ISOTOPIC,
AND PETROLOGIC COMPONENTS OF THE MARTIAN METEORITES
October 11–12, 2002
Houston, Texas

*To view an abstract, use the hand tool of your Acrobat Reader to click on the
title of a presentation.*

Friday, October 11, 2002
RADIOGENIC ISOTOPES AND OXYGEN FUGACITY
8:30 a.m. Berkner Rooms

WELCOME AND ANNOUNCEMENTS

- Borg L. E.* [INVITED 20-MINUTE PRESENTATION]
Exploring Trace Element and Isotopic Mixing Relationships in the Martian Meteorite Suite [#6004]
- Lee C. T.* [INVITED 20-MINUTE PRESENTATION]
A Brief Overview of Mantle Metasomatism
- Ripley E.* [INVITED 20-MINUTE PRESENTATION]
Chemical Effects on Interaction Between Magma and Wall Rock
- Dreibus G.* Jagoutz E.
Crust-Mantle Reservoirs of Radiogenic Isotopes of Mars and Earth: Where Can We See a Mixing? [#6002]
- Nyquist L. E.* Shih C.-Y. Wiesmann H. Barrat J. A.
An "Andesitic" Component in Shergottites with Restored LREE Abundances? [#6020]
- Herd C. D. K.*
Martian Basalt Oxygen Fugacity and Geochemistry: Implications for a Heterogeneous Martian Mantle [#6014]
- Musselwhite D. S.* Wadhwa M.
REE in Shergottite Augites and Whole Rocks [#6024]
- McCanta M. C.* Rutherford M. J.
Oxygen Fugacity Recorded in Pigeonite: Indications of a Heterogeneous Martian Magma Source Region? [#6013]

* Denotes Speaker; [] Denotes Abstract Number

Friday, October 11, 2002
BASALTS AND PHASE EQUILIBRIA (ON MARS)
1:30 p.m. Berkner Rooms

Glazner A. * [INVITED 20-MINUTE PRESENTATION]
Thermal Constraints on Magma Mixing and Assimilation

Hess P. * [INVITED 20-MINUTE PRESENTATION]
Origins of the Martian Crust and Mantle [#6029]

Longhi J. *
SNC Meteorites and Their Source Composition(s) [#6022]

Kring D. A. *
QUE 94201: Reconsidering Its Origins as a Bulk Melt from a Volcanic Region of Mars [#6005]

Goodrich C. A. *
Petrogenesis of Olivine-Phyric Shergottites Sayh Al Uhaymir 005 and Elephant Moraine A79001
Lithology A [#6018]

Friday, October 11, 2002
POSTER SESSION
5:00 – 7:00 p.m. Great Room

Jagoutz E. J. Dreibus G. D.

New Aspects in the Isotope Systematics of Shergottites [#6015]

Schwenzer S. P. Mohapatra R. K. Herrmann S. Ott U.

Nitrogen and Noble Gases in Mineral Separates from Zagami [#6010]

Dyar M. D.

Mössbauer Spectroscopy of SNC Meteorites [#6011]

Hartmann W. K.

Mars Meteorite Statistics and the Martian Uplands [#6027]

Shirai N. Oura Y. Ebihara M.

Chemical Composition of Newly Collected Antarctic Nakhilites, Y000593 and Y000749 [#6017]

Sautter V. Barrat J. A. Jambon A.

Is Olivine Speedometer a Reliable Tool to Constrain Thermal Story of SNC Meteorites? [#6003]

****This Poster Canceled****

Ocker K. D. Holland G. Gilmour J. D.

Evolution of Martian Atmospheric, Crustal and Mantle Xenon Components in Basaltic Shergottites [#6016]

Rao M. N. McKay D. S.

Shergottite Impact Melt Glasses Contain Soil from Martian Uplands [#6012]

Mohapatra R. K. Murty S. V. S.

Silicon in Mars' Core: A Prediction Based on Mars Model Using Nitrogen and Oxygen Isotopes in SNC Meteorites [#6009]

Mittlefehldt D. W.

Geochemistry of Martian Meteorites and the Petrologic Evolution of Mars [#6025]

Walton E. L. Spray J. G.

Chemistry and Microtextures of Melt Pockets in the Los Angeles Basaltic Shergottite [#6030]

Saturday, October 12, 2002
GEOPHYSICS AND TRACE ELEMENTS
8:30 a.m. Berkner Rooms

Parmentier M.* [INVITED 20-MINUTE PRESENTATION]

Convection and Layering in the Martian Mantle

Kiefer W. S.*

*Melting the Martian Mantle: Shergottite Formation and Implications for Present Day
Mantle Convection on Mars* [#6006]

Jones J. H.*

SNC Meteorites and Martian Reservoirs [#6008]

Treiman A. H.*

*Element-Element Correlations Among Martian Meteorite Bulk Compositions: Peculiarities Explained(?)
by Mixing, with Implications for the Composition of Mars* [#6026]

Barrat J. A.* Beck P. Chaussidon M. Gillet Ph. Jambon A. Göpel C. Sautter V.

Incompatible Trace Elements in SNCs and Li Isotopes Systematics in a Shergottite [#6007]

****This Talk Canceled****

Saturday, October 12, 2002
NOBLE GASES AND SUMMATION
1:30 p.m. Berkner Rooms

Pepin R. O. * [INVITED 20-MINUTE PRESENTATION]

Noble Gases in the Terrestrial Planets, with Focus on what the SNC Meteorites Tell Us About Mars [#6028]

Swindle T. D. *

Some Puzzles About What Noble Gas Components Were Mixed into the Nakhrites, and How [#6019]

Delaney J. S. * Dyar M. D.

What Should We Looking for in Martian Meteorites? Is Evidence of Crustal Process or Mantle Process More Important — and to Whom? [#6021]

GENERAL DISCUSSION